

What is claimed is:

1. A drawer-type mobile phone comprising:
a main body having a microphone;
5 a drawer cover mounted at the main body so as to be slidably moved vertically; and
an operating unit for moving the drawer cover by one touch.
2. The mobile phone according to claim 1, wherein the drawer cover
10 includes a transparent window at a portion corresponding to an LCD part of the main body and a speaker hole formed at a predetermined portion of the upper side of the transparent window.
3. The mobile phone according to claim 1, wherein the drawer cover
15 is formed in a panel form so that both margins thereof can be moved along the both side faces of the main body.
4. The mobile phone according to claim 1, wherein a speaker is
mounted at the inner surface of the upper side of the drawer cover.
- 20 5. The mobile phone according to claim 4, wherein the speaker is supported by a bracket unit to which a cover is attached.
6. The mobile phone according to claim 4, wherein the speaker is
25 connected with an audio amplifier through a connecting member.

7. The mobile phone according to claim 6, wherein the connecting member comprising:

a circuit wiring attached at the inner side of the drawer cover, of which one end is connected with the speaker; and

5 a terminal member for connecting the circuit wiring with the audio amplifier.

8. The mobile phone according to claim 7, wherein the terminal comprising:

a plunger terminal of which one end is movably adhered to the surface of the circuit wiring and the other end is connected with the audio amplifier;

a terminal case mounted so that the plunger terminal can be linearly moved; and

a compression spring inserted in the terminal case, for elastically compressing the plunger terminal.

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9. The mobile phone according to claim 1, further comprising:

an antenna being movably connected with a tuner terminal which is connected to the main body and interworking with the drawer cover; and

an antenna binding member for binding the antenna.

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10. The mobile phone according to claim 9, wherein the antenna comprising:

a head protruded upwardly from the drawer cover through the antenna hole;

25 a whip part formed at the lower side of the head; and

a moving terminal formed at the lower side of the whip part and being connected with the tuner terminal of the main body.

11. The mobile phone according to claim 9, wherein the antenna
5 binding member comprising:

an outer bushing fixedly mounted at the antenna hole; and

an inner bushing combined at the inner side of the outer bushing and binding the whip part of the antenna.

10 12. The mobile phone according to claim 11, wherein the inner bushing is threaded with the outer bushing and made of a material having an adequate friction force so that the antenna can be pulled out by an external force.

13. The mobile phone according to claim 12, wherein the material
15 having an adequate friction force is rubber.

14. The mobile phone according to claim 1, wherein the operating unit comprising:

a pinion gear mounted at one side of the main body;

20 a rack gear fixedly mounted at one side of the drawer cover to be engaged with the pinion gear;

a driving motor mounted at the main body for providing a driving force;

a worm gear unit for transmitting the driving force of the driving motor to the pinion gear; and

25 a control switch for turning on and turning off the operation of the driving

motor.

15. The mobile phone according to claim 14, wherein the worm gear unit comprising:

- 5 a worm wheel fixedly mounted at the central shaft of the pinion gear; and
a worm gear mounted at the driving shaft of the drive motor, so as to be in mesh with the worm wheel.

10 16. The mobile phone according to claim 1, wherein the operating unit comprising:

- an automatic moving member for vertically moving the drawer cover;
a binding member for selectively binding one end of the drawer cover when the drawer cover is closed and releasing the binding state of the drawer cover when the drawer cover is opened; and
15 a motion restraining member for restraining the drawer cover from releasing from the main body when the drawer cover is opened.

17. The mobile phone according to claim 16, wherein the automatic moving member comprising:

- 20 a spring-type pinion gear mounted at one end of the main body; and
a rack gear fixedly and horizontally mounted at one side of the drawer cover so as to be engaged with the pinion gear.

18. The mobile phone according to claim 17, wherein a volute spring
25 of which one end is fixed at the central shaft and the other end is fixed at the outer

side of the pinion gear, is mounted at the pinion gear, for holding or releasing a repulsive force according to the rotation direction of the pinion gear.

19. The mobile phone according to claim 16, wherein the binding
5 member comprising:

a hooking protrusion provided at a predetermined portion of the side face inside the drawer cover;

a press button having a support bar mounted at side surface of the main body, extending inwardly of the main body;

10 a fixing support for supporting the front end of the support bar;

a hooking piece mounted at the support bar for hooking the hooking protrusion in a closed state; and

a twisted spring mounted at the support bar for applying an elastic force to one side of the hooking protrusion.

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20. The mobile phone according to claim 16, wherein the binding member comprising:

a metal piece attached at the lower end of the drawer cover;

a solenoid attached at a predetermined portion of the main body
20 corresponding to the metal piece;

a key circuit board for supplying a voltage to the solenoid; and

a press button for turning on or off the key circuit board.

21. The mobile phone according to claim 16, wherein the binding
25 member comprising:

a metal piece attached at the lower end of the drawer cover; and
a press button attached to the main body in a manner of being vertically moved, having a magnet piece to attract the metal piece formed at one side thereof.

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22. The mobile phone according to claim 16, wherein the binding member comprising:

an upper magnet piece attached at the lower end of the drawer cover; and
a slide button attached at the main body so as to be horizontally movable
10 by virtue of the spring, having a lower magnet piece to attract the upper magnet piece.

23. The mobile phone according to claim 16, wherein the motion refraining member comprising:

15 a hooking groove formed at the inner side of the drawer cover; and
an elastic piece formed at one side of the main body so as to be hooked by the hooking groove when the drawer cover is opened.

24. The mobile phone according to claim 23, wherein the elastic piece
20 is formed in a manner that one end thereof is fixed at the main body and the other end is gently bent upwardly.

25. The mobile phone according to claim 23, wherein the elastic piece is formed in a manner that the central portion thereof is gently bent and protruded
25 with both ends fixed at the main body.

26. The mobile phone according to claim 23, wherein the elastic piece is made of a material which is suitably deformed as being pressed by the drawer cover when the drawer cover is closed.

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~~27.~~ A drawer-type mobile phone comprising:

a main body provided with a microphone;

a drawer cover slidably movable linearly, having a panel form so as for both margins thereof to be moved along both side faces of the main body;

10 a speaker mounted at the upper inner surface of the drawer cover, being connected with an audio amplifier of the main body through a connection member, and

an operating unit for moving the drawer cover by one touch.

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~~28.~~ A drawer-type mobile phone comprising:

a main body provided with a microphone;

a drawer cover slidably movable linearly, having a panel form so as for both margins thereof to be moved along both side faces of the main body;

20 a speaker mounted at the upper inner surface of the drawer cover, being connected with an audio amplifier of the main body through a connection member,

an antenna movably connected with a tuner terminal of the main body and mounted in a manner of being able to interwork with the drawer cover; and

an operating unit for moving the drawer cover by one touch.

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28. A drawer-type mobile phone comprising:

a main body provided with a microphone;

a drawer cover slidably movable linearly, having a panel form so as for
5 both margins to be moved along both side faces of the main body;

an automatic moving member for vertically moving the drawer cover;

a binding member for selectively binding one end of the drawer cover
when the drawer cover is closed and releasing the binding state of the drawer
cover when the drawer cover is opened; and

10 a motion restraining member for restraining the drawer cover from
releasing from the main body when the drawer cover is opened.